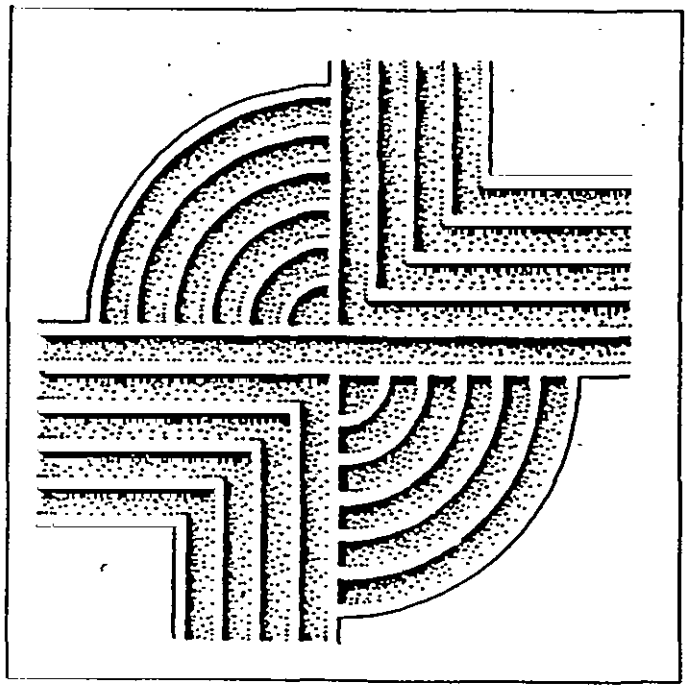
MANAGEMENT SUMMARY OF ARCHAEOLOGICAL DATA RECOVERY EXCAVATIONS AT 38BU19 AND 38BU1262, CALLAWASSIE ISLAND, BEAUFORT COUNTY, SOUTH CAROLINA



RESEARCH CONTRIBUTION 52

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Chicora Research Contribution 52

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October 29, 1990

Introduction

Callawassie Island is bordered to the north by the Chechessee Creek, to the east by a tributary of the Chechessee Creek and the Callawassie Creek, to the south and west by the Colleton River. The island is separated from neighboring Spring Island by the Callawassie Creek, which runs north-south. The Broad River lies to the east of Callawassie Island (Figure 1).

Large portions of the island have been previously developed and Chicora Foundation's investigations were limited to a series of seven areas encompassing about one-quarter of the total island. As a result of an intensive archaeological survey conducted by Chicora Foundation, Inc. on the first and second phases of the proposed Callawassie Island development (Trinkley 1990a, 1990b), six archaeological sites were determined by the South Carolina State Historic Preservation Officer (SC SHPO) as eligible for inclusion in the National Register of Historic Places. A Memorandum of Agreement between the SC SHPO and the Callawassie Development Corporation, currently pending, requires that these eligible sites be green spaced or receive data recovery excavations. In discussions with the SC SHPO, Callawassie Development Corporation determined that two sites (38BU428 and 38BU1263) would be green spaced while the remaining four sites (38BU19, 38BU464, 38BU1249, and 38BU1262) would receive data recovery excavations.

Chicora Foundation was requested by the developer's agent, Mr. Glen McCaskey, to develop a proposal for data recovery at the four sites which could not be green spaced. A proposal for those investigations was submitted by Chicora on August 6, 1990 and the work was approved by the SC SHPO on September 5, 1990 (letter from Dr. Linda Stine to Mr. Glen McCaskey). The work was approved by the developer on August 24, 1990.

This management summary has been prepared immediately upon completion of the fieldwork at 38BU19 and 38BU1262 (the management summary for sites 38BU464 and 38BU1249 having been previously submitted) and does not contain information on artifact or subsistence analyses. It is intended solely to provide a brief descriptive statement of the work conducted by Chicora and to allow the SC SHPO to verify that the proposed work has actually been accomplished. The management summary is minimally necessary for Callawassie Development Corporation to continue to the development of the land encompassing 38BU19 and 38BU1262. This construction will destroy portions of the sites and, of course, created the need for archaeological mitigation activities initially.

Archaeological investigations were begun at 38BU19 by a crew

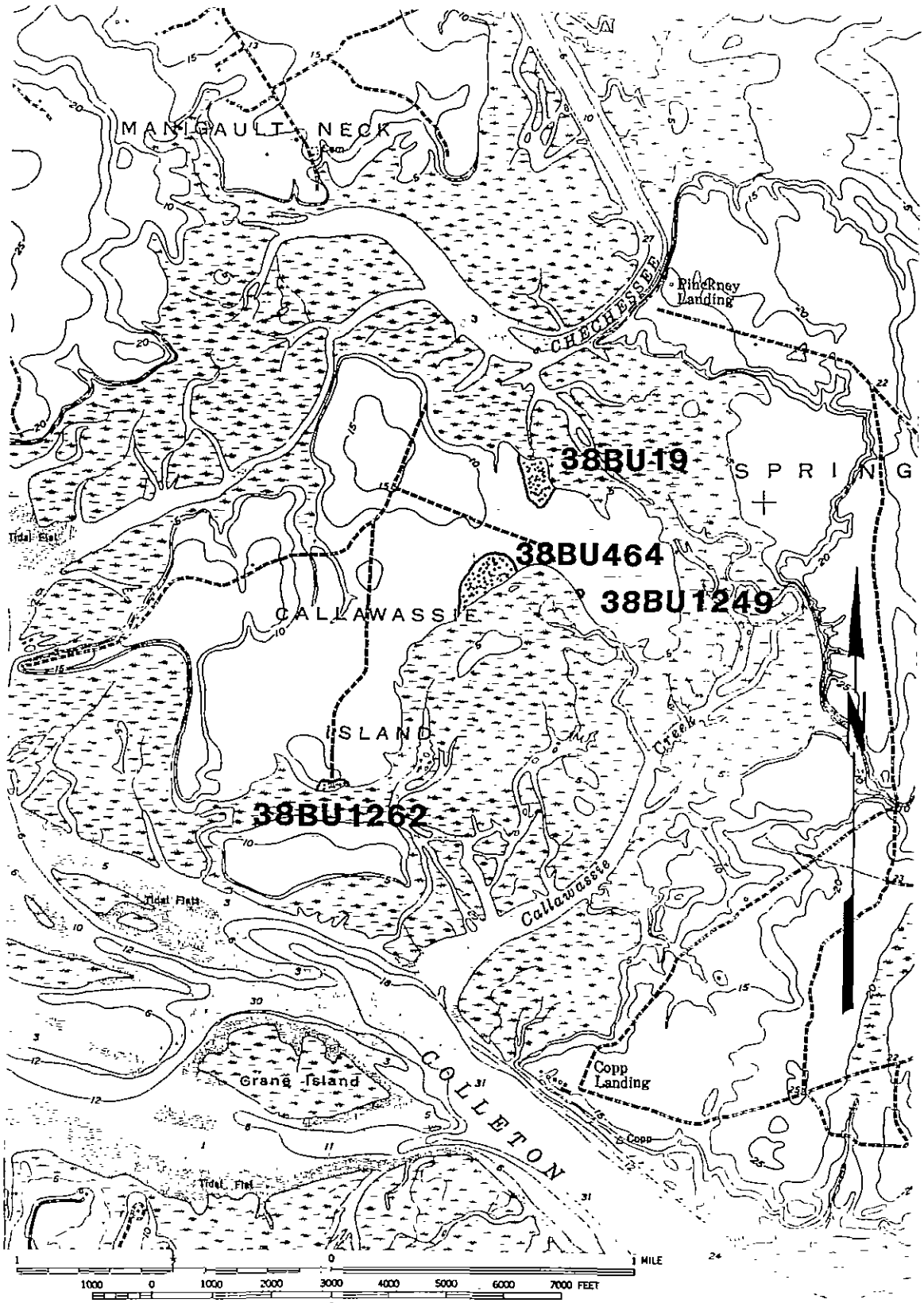

Figure 1. Callawassie Island showing the investigated sites.

of four (including the principal investigator) on October 4, 1990 and continued through October 10, 1990. Additional work was conducted at the site on October 25 and 26, 1990. A total of 187.5 person hours were spent in the field and an additional 26 person hours were spent on laboratory analysis and field processing. The shellfish consultant for this project, Dr. David Lawrence, spent 2 person hours in the field. As a result of this work 350 square feet of site area were opened and 230 cubic feet of soil and shell were moved in primary excavations, all screened through either 1/4 or 1/8-inch mesh.

The proposed investigations at 38BU19 were to include the excavation of 14 5-foot units (representing 1% of the site area to be impacted), followed by monitoring of the clearing and plotting of all identified features. Discussions with Mr. Jerry Beaman have revealed that Callawassie will not be ready to clear the site area during Chicora's field investigations, as originally planned. Consequently, Chicora has agreed to return to the site during the clearing process and complete the recordation process at a future date. Rather than delay the processing of this management summary by the State Historic Preservation Office until the clearing is completed, Chicora has opted for this interim report since the bulk of the required work has been performed.

Excavations at 38BU1262 were begun on October 16 and continued through October 25, 1990 by a crew of four. A total of 1100 square feet were opened with 736 cubic feet of primary excavations. A total of 240.5 person hours were devoted to the field investigations, with an additional 34 person hours of field processing. Dr. David Lawrence visited this site during the excavation phase for approximately 3 person hours.

A representative of Callawassie Development Corporation was notified verbally on October 29, 1990 that the work at site 38BU1262 was completed and that the units could be backfilled.

Previous Investigations

Site 38BU19 was originally reported by C.B. Moore (1898) and was identified by Michie (1982) during his Callawassie Island survey. Test excavations were conducted at the mound by Brooks in 1982 (Brooks et al. 1982). Additional survey of the mound vicinity was conducted by Chicora (Trinkley 1990a) at which time a more complete understanding of the mound and the associated village area began to emerge.

The site is situated on one of the last undeveloped areas of Callawassie Island. While the proposed development plans call for a series of lots to the north, east, and west of the mound, these investigations are concerned only with the edge of the site to the south of the mound proper. This area will be impacted by the construction of a new golf course and initial shovel testing, both

by Brooks et al. (1982:56) and Chicora (Trinkley 1990a), suggested that the core of the settlement surrounding the mound was located to the north and west.

Investigations have revealed the presence of primarily St. Catherines and Savannah wares both in the mound and in the surrounding "village" area. This is consistent with the discovery by Brooks et al. (1982:14-15) that the mound itself consists of midden debris, presumably gathered from the adjacent village settlement. The more recent survey work by Chicora revealed a similar temporal pattern, although Deptford and possibly Irene material was also present in small quantities.

This site was recommended as eligible for inclusion on the National Register of Historic sites based on the rarity of Middle to Late Woodland burial mounds in South Carolina, the presence of human remains, the occurrence of a village settlement around the mound, and the excellent integrity of the site.

Data recovery during this phase of work at 38BU19, however, was limited to that area within the fairway to the south of the mound. Given the greater likelihood of identifying intact village settlements to the north, west, and east of the mound, Chicora proposed to excavate a series of 14 dispersed 5-foot units in the fairway, amounting to a total of 1% of the site area to be impacted. After this work was completed, the fairway would be cleared and any additional shell middens or features encountered could be incorporated on the site plan. The excavations would be designed to examine both midden and non-midden areas south of the mound in order to collect both subsistence and settlement data for the site.

Site 38BU1262 was identified by Chicora during the 1990 survey of Callawassie Island (Trinkley 1990b). A series of 170 shovel tests were excavated, revealing the presence of several buried middens and Deptford, St. Catherines, and Savannah pottery. Presumably this site was not identified by Michie's earlier survey (Michie 1982) because there was no marsh exposure, although midden was evident in the dirt road which runs parallel to the marsh.

This site, while representing a variety of temporal periods, was recommended as eligible for the National Register based on its apparent integrity and its ability to provide comparative data for 38BU19 on Middle to Late Woodland settlement and subsistence patterns. The presence of a Deptford component was hoped to provide data useful for comparisons with that obtained from nearby Spring Island, as well as elsewhere on Callawassie.

Both Chicora and the SC SHPO recognized that site 38BU1262 required excavation and analyses different from many other sites if it was to yield useful data. Specifically, the major thrust of the excavations were to gather valid subsistence samples for dietary,

seasonal, and ecological studies. A second thrust, based on previous investigations at 38BU747 and 38BU1214 (on Spring Island), was a more intensive examination of interior areas adjacent to the middens. It was hoped that this approach would identify structural remains and evidence of intra-site activity areas. Consequently, Chicora was to excavate areas of both Deptford and later St. Catherines/Savannah occupation, while examining both midden and interior non-midden areas.

Excavations at 38BU19

The work at 38BU19 involved the excavation of 14 5-foot units systematically placed across the site area in order to investigate both shell middens and non-midden areas. These units were all laid out with a magnetic north orientation after the site had been bush hogged. Each unit was tied into the fairway center line for permanent horizontal control. A vertical datum was established at the northwest edge of the site, immediately outside the fairway construction zone, using a nail at the base of a pine tree. This nail was initially given an assumed elevation of 10.00 feet, but was later correlated with a more remote mean sea level (MSL) datum and was found to be at an elevation of 16.59 feet MSL.

In order to incorporate the previous work conducted by Brooks et al. (1982), the burial mound at 38BU19 was cleared of vegetation and the mound datum (situated immediately off the mound to the southwest) was found to be intact. This datum was left intact, but was remarked using three PVC witness posts, each about two feet from the datum. The mound datum was then tied into the fairway centerline survey. Based on Brooks et al. (1982:8-10), the mound datum had been assigned an assumed elevation of 0.00 meters. This datum is now recognized as having an elevation of 9.19 feet MSL.

Two of the 14 tests were placed in dense shell middens, one test was placed in an area of dense, but plowed, midden, and the remaining 11 tests were placed either in areas of no visible midden or areas adjacent to midden deposits. This strategy was intended to not only gather subsistence information from middens, but to investigate areas around the middens which might yield architectural information.

Each test unit was excavated in natural stratigraphic zones. These included Zone 1, a brown loamy sand, and Zone 2, a dense shell midden. Zone 1 varies in depth from 0.4 to 1.0 foot, while Zone 2 varies from 0.6 to 0.9 foot in depth. Underlying Zones 1 and 2 is a tan to yellow sandy subsoil, although one unit also evidenced the dense, natural clay subsoil typical to much of Callawassie Island. Units were troweled at the top of the subsoil, photographed in b/w and color slides, and plotted.

Zone 1 soils were screened through 1/4-inch mesh, while Zone 2 midden was screened through 1/8-inch mesh. In addition, a 1.1

foot square sample of each midden (representing a 5% sample of the unit) was weighed prior to sifting and the shell, collected for analysis by Lawrence, was weighed after screening. This provided a quantified statement of shell density for each of the middens (with shell/soil weight ratios of 1:0.9 in both of the undisturbed middens; in comparison the single plowed midden investigated contained a shell/soil ratio of 1:2.9). Lawrence also requested that a sample of right oyster valves be collected for more specific seasonal analysis.

A portion of one of the two column samples from intact midden deposits was sorted by species, revealing that 96.7% of the sample by weight represents oyster, 2.2% by weight represents periwinkle, and 1.1% by weight represents clam. Rare examples of ribbed mussel, stout tagelus, whelk, mud dog whelk, and land snails were also encountered. Ribbed mussel and stout tagelus may be deceptively infrequent because of their fragile shells. Regardless, the low numbers of these species suggests that they were incidentally collected during oyster gathering. The examination of the oyster remains will include species diversity, habitat information, season of collection, and preparation techniques.

The quantity of animal bone was found to be highly variable from midden to midden, but was virtually absent from the non-midden Zone 1 soils. Ethnobotanical remains appear to be sparse, although charred hickory nutshell fragments are present.

These excavations revealed three features and three post holes in four units. All were excavated during this project. All three of the features represent shell pits (Features 1, 2, and 3) and the three post holes are well defined. The features are found either under or at the edge of shell middens, while the post holes are found either at the edge of middens, or in non-midden areas. The most distinguishing feature of the features and post holes is that several produced relatively large quantities of daub.

Artifacts recovered from the site are predominately St. Catherines and Savannah phase pottery, with small quantities of lithic debris. This work continues to reinforce previous speculation that the St. Catherines and Savannah series pottery is contemporaneous. The excavations revealed that a large area of the site had been plowed, although this plowing rarely exceeded 0.8 foot in depth and appears to have avoided the dense shell midden areas. Further, the plowing clearly did not destroy the features, which are found intact below the shell middens or plowed soil.

The previous assessments regarding the village location for 38BU19 appear to be at least partially in error. While it may still be that the densest occupations occur to the north and east of the mound, it is clear that the village area (based on the presence of middens, features, post holes, and daub) extended south of the mound into the fairway area.

Field notes were prepared on pH neutral, alkaline buffered paper and photographic materials were processed to archival standards. All original field notes, with archival copies, will be curated at The Environmental and Historical Museum of Hilton Head Island as Accession Number 1990.7. All specimens will be evaluated for conservation needs prior to curation, although field assessments indicate that the prehistoric materials are stable.

Excavations at 38BU1262

The grid, established N37°W, perpendicular to the marsh, was tied into several surveyed lot markers in order to maintain long-term horizontal control. This base line established perpendicular to the marsh edge is considered grid north-south. Given the limited site area, only one permanent grid point was established, at the north edge of the site (350R500). Vertical control was maintained through the use of a nearby temporary benchmark with a mean sea level (MSL) elevation. The permanent point established at 350R500 was determined to have an elevation of 14.51 feet MSL. A second control point was established at the southern edge of the site (a nail with an elevation of 10.87 feet in the base of an oak tree).

Units were established using a modified Chicago 10-foot grid, with each square designated by its southeast corner, from a 0R0 point at the southwest corner of the site. Thus the southwest corner of square 10R20 would be located north 10 feet and right (or east) 20 feet from the 0R0 point.

During the survey phase several small subsurface midden areas were identified which exhibited a high density of shell. Although a relatively low density of pottery was encountered, the remains appeared to date from the late Early Woodland Deptford phase through the late Middle Woodland St. Catherines phase and the Late Woodland Savannah Phase. These investigations relocated two of the previously identified middens and work was initially concentrated in these two site areas.

The first area, situated at the southern edge of the site adjacent to the marsh, was investigated with a 10-foot unit and two five foot units (75R500, 80R500, and 90R500). The second area, at the north edge of the site, was investigated with a series of six 10-foot units (260R500-520, 270-290R500). As work continued it was decided that a series of six 5 by 10 foot units would be placed between these two block excavations in order to determine if activity areas existed in the intervening site area. Consequently, units 120-130R500, 160-170R500, and 200-210R500 were excavated forming 5 by 20 feet trenches at 20 foot intervals between the two block excavations.

Stratigraphy in the site area includes Zone 1 humic brown sand soil up to 0.9 foot in depth and Zone 2 dense shell midden, both overlying a tan to yellow sand subsoil. The investigated shell

middens, identified primarily in 260R520 (in the northern area) and 75-80R500 (in the southern area), are estimated to be about 15 to 20 feet in diameter and to have a maximum depths of 0.8 foot.

Soil from the northern midden excavations was dry screened through 1/8-inch mesh using mechanical sifters. In addition, a 2.25 foot square sample of the midden was weighed prior to sifting and the shell, collected for analysis by Lawrence, was weighed after screening. This provided a quantified statement of shell density for the investigated midden (the shell/soil weight ratio is 1:0.4). Species analysis revealed that the midden is 99.9% oyster by weight, with very small quantities of ribbed mussel, whelk, periwinkle, and land snail. Lawrence also requested that a sample of right oyster valves be collected for more specific seasonal analysis.

Soil from the southern midden was discovered to be too wet for practical screening through 1/8-inch mesh and was therefore screened through 1/4-inch mesh. Two factors contributed to this problem. The first was the approximately 9 inches of rain which Callawassie Island received immediately before excavations were begun at this site. The other, and primary cause, is the very low topography of the midden at the southern edge of the site. While the northern midden is at an elevation of about 13 feet MSL, the southern midden is at an elevation of about 8 feet MSL and is bedded on gray marsh muck. The column sample from the southern midden revealed a shell/soil weight ratio of 1:0.4.

Elsewhere on the site Zone 1 soils were screened through 1/4-inch or 1/4 by 1/2 inch mesh (depending on the moisture content of the soils). The increase in mesh size for these zones was based on our belief that small bones, absent the alkaline environment of the shell midden, would not be preserved in the naturally acidic soils. In those areas not associated with middens, and in the plowzone middens, bone was, in fact, very uncommon and the use of the larger screen size appears appropriate.

The excavations revealed that the lower elevations of the site had not been plowed. The northern area, exclusive of the dense middens, had been thoroughly plowed to a depth of about 0.8 foot.

Very little animal bone was recovered from these excavations, although the remains found include primarily fish, with very small numbers of mammal remains. Ethnobotanical remains appear to be sparse, although charred hickory nutshell fragments are found in the excavations.

Units were troweled at the top of the subsoil, photographed in b/w and color slides, and plotted. Excavation was by natural soil zones and soil samples were routinely collected.

These excavations revealed two features, both of which were

excavated (Features 1 and 2). No post holes were encountered. Both features represent shell pits found at the edges or under the shell midden deposits at the north edge of the site.

Artifacts recovered from the middens and features are predominately St. Catherines and Savannah phase pottery, with small quantities of Deptford pottery. While this summary represents only a preliminary assessment of the site, it appears that this site dates from the Late Woodland with the earlier Deptford material being sparse and poorly preserved.

Field notes were prepared on pH neutral, alkaline buffered paper and photographic materials were processed to archival standards. All original field notes, with archival copies, will be curated at The Environmental and Historical Museum of Hilton Head Island as Accession Number 1990.7. All specimens will be evaluated for conservation needs prior to curation, although field assessments indicate that the prehistoric materials are stable.

Interpretations

Excavations at 38BU19 continue to reveal the complexity and importance of this large site. Although only a small portion of the site was incorporated into this data recovery program, it is clear that the village area surrounding the mound was intensively occupied by a relatively stable group. Features and post holes are well preserved and additional investigations in the areas surrounding the mound should yield settlement data. Subsistence information is limited, primarily because of the limited nature of the excavations. Dense shell middens are found at the site, yielding a variety of shellfish remains which appears typical of these later Woodland sites. Faunal remains, while present, do not appear particularly dense. It seems most likely that this is the result of the very limited sample size and the intensive plowing which has taken place south of the mound. Ethnobotanical remains are present and may be most productively identified from feature or structural contexts (rather than from general midden or plowzone excavations).

Excavations at 38BU1262 reveal that this site is contemporaneous with 38BU19, but that it may be distinct in settlement and subsistence strategy. While 38BU19 and 38BU464 (Trinkley 1990c) appear to be an intensively occupied sites, 38BU1262 appears to represent short-term occupation. It will be useful to compare the subsistence data from these three sites in order to arrive at better estimates of seasonality and site functions.

As previously discussed, it has not been possible to schedule the clearing of 38BU19 as originally proposed. When this clearing is undertaken, Chicora will record any additional features or information which may be identified and this information will be

incorporated into the final report on these excavations. Future work at 38BU19, however, should be conducted with the realization that the village area surrounding the mound is not only dense, but will also most likely yield very significant settlement and architectural data.

During these investigations it was discovered that the 1982 excavations on the mound had never been backfilled by Three Fountainview Corporation. As a result there has been considerable slumpage and erosional damage. It is essential that these excavations be immediately backfilled by Callawassie Development Corporation in order to preserve the integrity of the mound (which contains not only significant archaeological data, but also certainly additional human burials). This work should be conducted by hand, using clean sand (in order clearly distinguish backfilling from intact mound soil).

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